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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,581	09/26/2003	John E. Krech	57135US004	8668

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EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,581

Applicant(s)

KRECH ET AL.

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5,7,8 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,5 and 8 is/are allowed.
- 6) ☒ Claim(s) 2,3,7 and 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Pending Claims

Claims 2-5, 7, 8, and 10-25 are pending.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. The provisional rejection of claim 1 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 62 of copending Application No.

09/990,601 has been rendered moot by the cancellation of claim 1.

3. The provisional rejection of claims 2-5 and 7-20 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 30, 32-37, 46-53, and 55-62 of copending Application No. 09/990,601 has been rendered moot by the amendments to instant claims 2 and 4.

4. Claims 2, 11-16, 18, 19, and 23-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 63 of copending Application No. 09/990,601. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

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1) The pallet of copending claim 63 is the obvious product of the method set forth in instant claims 2, 12, and 23-25.

2) The limitations of claims 11 and 13-16 are not explicitly set forth in the copending claim; however, the copending specification shows that these limitations are exemplary embodiments of the thermosetting resin, polyolefin, and flame retardant of the copending application – *see paragraphs 0062, 0073-0075, and 0083*. See also MPEP 804 II B 1.

3) The limitations of claims 18 and 19 are not explicitly set forth in the copending claim; however, it would have been obvious to optimize the amount of flame retardant because this quantity is result effective variable that significantly impacts the flame-retardant properties of the overall composition – *see MPEP 2144.05 II A & B*.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. The rejection of claim 20 under 35 U.S.C. 112, second paragraph, has been overcome by amendment.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. The rejection of claims 1, 4, 5, and 17 under 35 U.S.C. 102(b) as being anticipated by Terao et al. (JP 07-331033) has been rendered moot by the cancellation of claim 1.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. The rejection of claims 2, 3, 7, 10, 12, 13, 15, 16, and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Moore, Jr. et al. (US Pat. No. 6,705,237) in view of Terao et al. (JP 07-331033) has been overcome by amendment.

11. Claims 2, 3, 7, 10, 11, and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perez et al. (US Pat. No. 5,709,948) in view of Nodera et al. (Pub. No.: US 2002/0115789).

Regarding claims 2, 3, 7, 10, 11, 13-17, and 20, Perez et al. disclose: **(2)** a method for producing a flame retardant-containing plastic shipping or storage container **or one or more shaped parts thereof** (column 10, lines 16-34) comprising the steps:

a) admixing a composition comprising: (1) one or more thermosetting resins and one or more curing agents thereof (Abstract), (2) a fully pre-polymerized uncrosslinked hydrocarbon polyolefin resin, and optionally a fully pre-polymerized uncrosslinked functionalized polyolefin (Abstract); and

b) exposing said composition to curing conditions after forming the composition into a shipping or storage container **or one or more shaped parts thereof** (column 10, lines 16-34), wherein said polymeric composition comprises: 1 to 49 parts by weight of said curable thermosetting resin, the parts by weight being based on the total composition (Abstract); and 51 to 99 parts by weight of a combination of at least one of said fully pre-polymerized uncrosslinked hydrocarbon polyolefin resin and said fully pre-polymerized uncrosslinked

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functionalized polyolefin resin, the parts by weight being based on the total composition (Abstract); wherein said hydrocarbon polyolefin is present in the range of 25 to 99 parts by weight of the total composition and said functionalized polyolefin is present in the range of 0 to 50 parts by weight of the total composition (Abstract), and

wherein said plastic container composition contains a flame retardant (column 4, line 64 through column 5, line 13);

(3) wherein said composition comprises a foamed structure (column 11, line 63 through column 12, line 3);

(7) further comprising one or more performance enhancement additives selected from the group consisting of antimicrobial additives, mildewcides, foaming agents, fillers, and friction material on at least one surface thereof (column 10, lines 1-14); (10) present in the range of more than 0 and up to 70 parts by weight of the total composition (column 10, lines 1-14); (17) wherein said plastic container comprises one or both of bubbles and glass beads as fillers (column 10, lines 1-14);

(11) wherein said uncrosslinked pre-polymerized polyolefin resin is selected from the group consisting of homo-polymers, copolymers, blends with other polyolefins, blends with high impact polymers and blends with rubbers or elastomers (column 9, lines 26-67);

(13) wherein said thermosetting resin is selected from *see claim for list* (column 5, lines 13-67);

(14) wherein said thermosetting resin is an epoxy resin (column 5, lines 13-67);

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(15) wherein the polyolefin resin is selected from the group consisting of alpha-olefins, copolymers of alpha-olefins, and functionalized polyolefins wherein the functionalized groups include one or more of O, N, S, and P atoms (column 9, lines 26-67); and

(20) wherein the resulting cured composition comprises an inter-penetrating polymer network (Abstract).

Perez et al. disclose the use of a flame-retardant, such as a halogenated flame retardant (*see column 5, lines 4-8*); however, they fail to disclose the use of (2) a non-halogenated flame retardant; (16) wherein said flame retardant is selected from the group consisting of ammonium phosphates, compounds containing phosphorus-nitrogen bonds, and cyclic phosphates.

Nodera et al. also disclose a polymeric blend used to make injection mouldings (*see Abstract*). They use a flame retardant, wherein, "Halogen-containing flame retardants are relatively effective, but are not preferred, as they often discharge harmful substances when moldings comprising them are incinerated. Therefore, preferred are non-halogenated flame retardants, as they are safe and do not pollute the environment. One example of non-halogen flame retardants is a non-halogen, phosphorus-containing organic flame retardant. Any organic compounds containing phosphorus but not containing halogen are employable herein with no limitation, so far as they serve as flame retardants," (*see paragraphs 0064-0065*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a phosphorus-based non-halogenated flame retardant, as taught by Nodera et al., in the molding blend of Perez et al. because Nodera et al. disclose that the use of such flame retardants in molding blends is safe and environmentally friendly.

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Regarding claims 18 and 19, the combined teachings of Perez et al. and Nodera et al. do not disclose the claimed amounts of non-halogenated flame retardant. However, it would have been obvious to optimize the amount of flame retardant because this quantity is a result effective variable that significantly impacts the flame-retardant properties of the overall composition – see *MPEP 2144.05 II A & B*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an optimum amount of non-halogenated flame retardant, of up to 70 pbw and up to 25 pbw because the amount is recognized in the art as a result effective variable. This amount significantly impacts the flame-retardant properties of the overall composition.

Regarding claims 21 and 22, these limitations are drawn to the embodiment of said container, not the embodiment of one or more shaped parts thereof. Hence, these optional limitations are satisfied by the art because they are not required.

In all of the above claims, it should be noted that **one or more shaped parts thereof** has very little structural limitation. This piece can any molding, so long as it is capable of being used as or as a part of a shipping or storage container. Accordingly, the moldings of Perez et al. have been applied as prior art because they appear to be capable of being used as or as a part of a shipping or storage container.

Allowable Subject Matter

12. Claims 4, 5, and 8 are allowed.
13. Claims 12 and 24 would be allowable if rewritten to overcome the ODP rejection(s) and to include all of the limitations of the base claim and any intervening claims.

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14. Claims 23 and 25 would be allowable if rewritten or amended to overcome the ODP rejection(s).

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

December 22, 2005

**MICHAEL FEELY
PRIMARY EXAMINER**